

ENGLISH:

Potential ACT English Alignment - Electrical Circuits Unit

Our **electrical circuits unit** can connect not just to science and math, but also to **ACT English skills**. The ACT English section isn't just about grammar—it's about **clarity, precision, and effective communication**, all of which are essential for **scientific writing and technical literacy**.

This unit can reinforce ACT English skills in three key areas:

1. Production of Writing - Organization & Clarity

First, we focus on how students **organize and structure their writing** when explaining scientific concepts.

- They'll practice writing clear, logical explanations of circuits and electricity.
- We'll help them **revise** their writing to remove **redundancy and ambiguity**—just like they would on the ACT.

✓ Example Skills Covered:

- Identifying **the main idea** in a paragraph about voltage and current.
- Choosing the most logical order of sentences in an explanation of Ohm's Law.
- Revising wordy or unclear explanations for precision and clarity.

2. Knowledge of Language - Precision & Word Choice

Next, we'll work on scientific word choice and tone to make writing more precise.

- Students will learn how to simplify technical language while keeping it accurate.
- They'll eliminate wordiness and unnecessary jargon, just like the ACT asks them to do.

✓ Example Skills Covered:

- Selecting the **best transition** between ideas in a discussion of series vs. parallel circuits.
- Ensuring scientific terminology is used correctly and effectively.
- Making explanations more formal, direct, and clear.



3. Conventions of Standard English – Grammar & Sentence Structure

Finally, we'll reinforce **sentence structure**, **punctuation**, **and grammar**, which are critical for technical writing.

- Students will **proofread and edit** explanations of circuits, applying ACT grammar rules.
- They'll refine **sentence structure** to make their writing smoother and more effective.

✓ Example Skills Covered:

- Correcting **misplaced modifiers** in a passage about resistance and current.
- Identifying sentence fragments in a scientific explanation.
- Improving comma usage and parallel structure in circuit comparisons.

Why This Matters for ACT Success

This unit not only strengthens students' understanding of **electricity and circuits**, but also builds **the communication skills they need for the ACT and beyond**. Whether they're explaining a scientific principle, analyzing data, or writing a technical report, these are skills that will serve them well in **STEM careers, college courses, and professional communication**.